InZennio Z41. Capacitive color touch panel
ZN1VI-TP41C

Technical Documentation

CHARACTERISTICS

- 4.1'' capacitive color touch panel.
- LCD display of 16 million colors.
- Up to 6 configurable pages.
- 48 configurable direct control and/or indicator functions.
- 2 independent thermostats.
- Additional screens to control:
  - Configuration.
  - Tools.
- Built-in temperature sensor.
- Real Time Clock (RTC) with watch battery.
- External power supply 12-29VDC needed.
- KNX BCU integrated.
- Connections: Ethernet RJ45 4 poles/USB.
- Magnetic fit.
- Complete Data Saving in case of Power Failure.
- CE directives compliance.

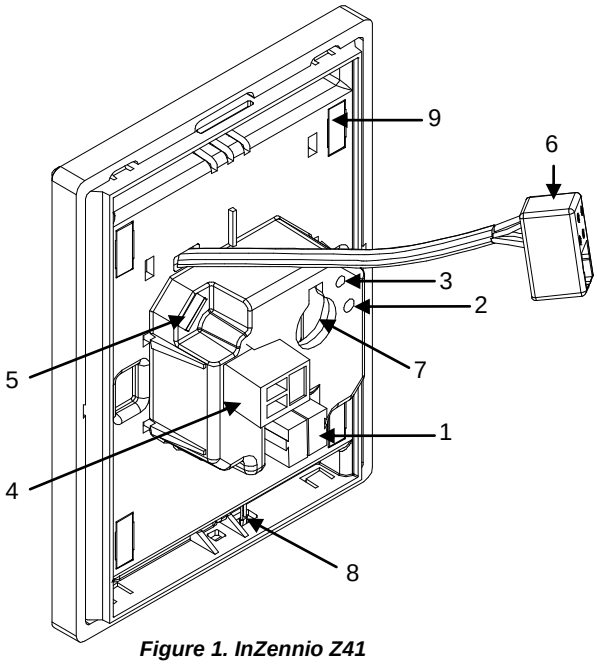


Figure 1. InZennio Z41

1. KNX Connector	**2**. Programming Button	**3**. Programming LED	**4.** External power supply connector
5. Mini-USB connector	**6**. Ethernet connector	**7**. Battery	**8**. Temperature sensor	**9**. Magnet

Programming button: a push button to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into safe mode.
Programming LED: programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second.

GENERAL SYSTEM SPECIFICATIONS

CONCEPT		DESCRIPTION
Type of device		Electric Operation Control device
KNX Supply	29V DC SELV	29V DC SELV
	21…31V DC	21…31V DC
	Power consumption	10 mA
	Bus connection	Typical bus connector TP1, 0,50 mm² section
External Power Supply		12- 29 VDC. Maximum consumption: 150mA (12VDC), 76mA (24VDC), 63mA (29VDC). For minimum consumption use 12VDC.**Do not connect 29VDC KNX bus as external power supply**
Operating Temperature		0º C to +45º C
Storage Temperature		-20º C to +60º C
Ambient humidity (relative)		30 to 85% RH (no condensation)
Storage humidity (relative)		30 to 85% RH (no condensation)
Complementary characteristics		Class B
Safety class		III
Operation type		Continuous operation
Device action type		Type 1
Electrical solicitations period		Long
Nº of Automatic cycles per auto action		100.000
Type of Protection		IP20, clean environment
Assembly		Independent Control Assembly device. Vertical position, with the temperature sensor to the bottom. Magnetic fit. See *Installation and Connection Diagram*
Minimum clearances		Keep away from heat and cold air flows to get better temperature sensor measures
Response to bus voltage failure		Complete data saving. Initialization screen.
Response to bus failure recovery		Before failure data recovery
Response to external power supply failure		Complete data saving. Display is switched off
Response to external power supply failure recovery		Current data recovery
Function indicator		Several on display as programmed
Accessories		RJ45 Connector cable (included). Mini USB A-B cable Ref. ZN1AC-UPUSB (not included)
Weight		190 gr. Without metallic piece / 230 gr. With metallic piece
PCB CTI Index		175 V
Enclosure material		PC+ABS FR V0 halogen free

POWER SUPPLY AND PORTS SPECIFICATIONS AND CONNECTIONS

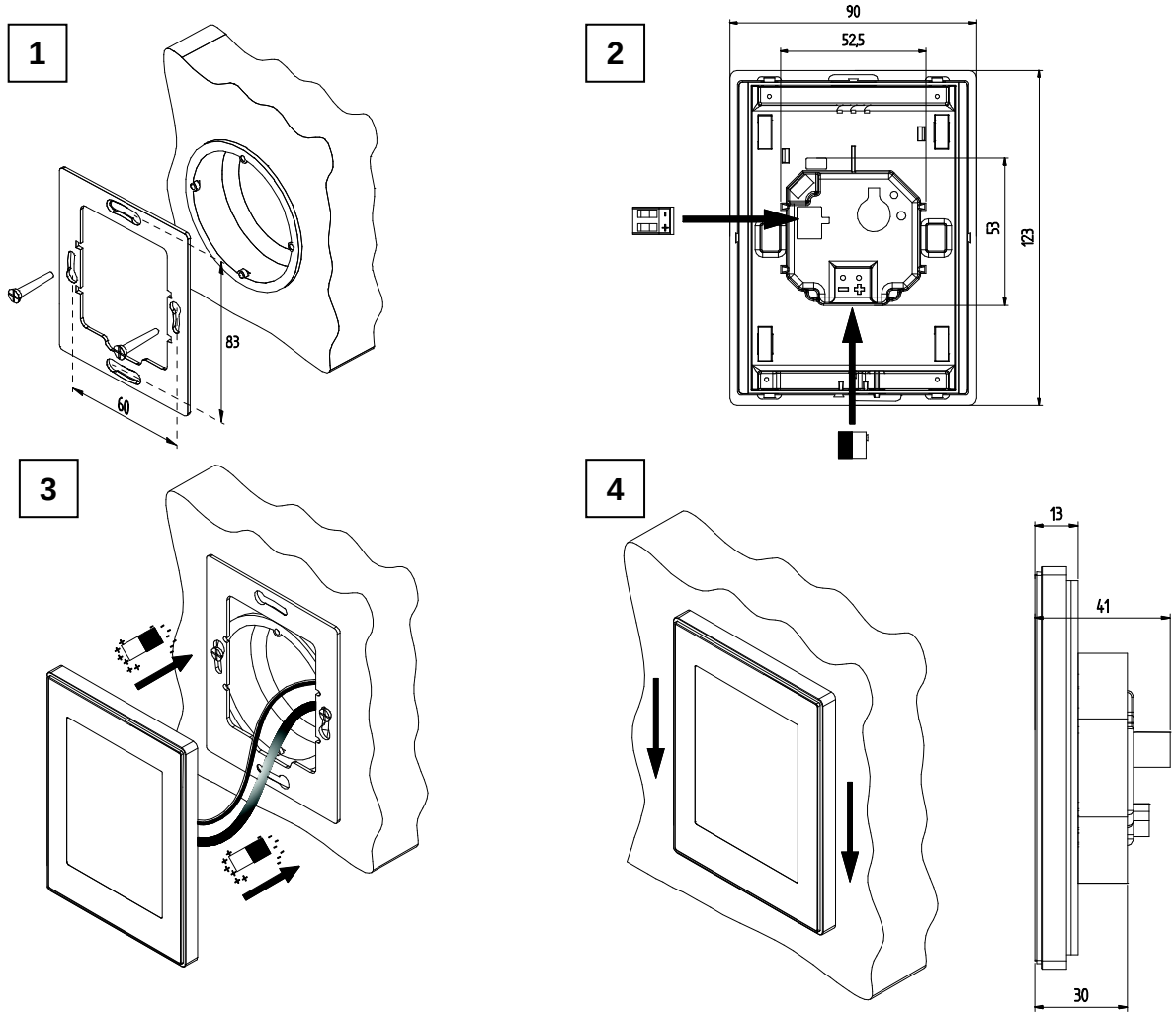
CONCEPT	DESCRIPTION
External power supply connection	Cable screw terminal and matching socket
Ethernet Connector	RJ45 connector with 4 poles: Rx(+), Rx(-), Tx(+) and Tx(-). To use this port, consult the *Manual for Firmware Update* at www.zennio.com.
USB Connector	Mini USB Type A connector. Version 2.0. Use this port only for firmware updates. Consult the *Manual for Firmware Update* at www.zennio.com. Do not connect to PC, hard drives or other devices with consumption higher than 150 mA.

TEMPERATURE SENSOR AND INTERNAL CLOCK SPECIFICATIONS	
CONCEPT	**DESCRIPTION**
INTERNAL TEMPERATURE SENSOR	
Measuring range	-10 to 50ºC
Resolution	0.1ºC
Sensor precision @25ºC	1 %
Calibration	The temperature sensor should be calibrated through the application program according to the external power supply connected and the frequency of usage
INTERNAL CLOCK	
Resolution	1 minute in display/ 1 second in KNX bus
Precision	30 ppm
Power supply	SR44 1.5V battery (batch numbers before 13X04XXXX) CR1225 3V battery (batch number 13X04XXXX and following)
Data/time Set	Manual (set from screen) or auto (through KNX Clock telegrams in bus)
Response to power failure (bus or external power supply)	It does not affect to internal clock
Response to power recovery	The internal error shows current time

INSTALLATION AND CONNECTION DIAGRAMS

Step 1: Place the metallic piece into a squared or rounded standard mounting box with the own screws from the box.
Step 2: Connect the KNX bus at the rear of Z41, as well as the external power supply terminal.
Step 3: Once the power supply and bus KNX are connected, fit Z41 in the metal platform. The device is fixed thanks to the magnets.
Step 4: Slid Z41 downwards to fix it with the security anchorage system. Check, from the side, that nothing unless Z41 outline can be seen (the metal platform should be completely hidden by Z41).

To uninstall proceed in the reverse way.



GENERAL CARE

- Do not use aerosol sprays, solvents, or abrasives that might damage the device.
- Clean the product with a clean, soft, damp cloth.

SAFETY INSTRUCTIONS

- Do not connect the main voltage (230V) or any other external voltages to any point of the KNX bus or the device. Connecting an external voltage might put the KNX system into risk.
- Ensure that there is enough insulation between the AC Voltage cables and the KNX bus.
- Do not expose this device to rain or high humidity.